(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International publication date 12 September 2003 (12.09.2003)

PCT

(10) International publication number

WO 03/075390 A2

(51) International patent classification⁷:

H01M 8/24

(21) International application number:

PCT/FR03/00672

(22) International filing date:

3 March 2003 (03.03.2003)

(25) Language of filing:

French

(26) Language of publication:

French

(30) Data relating to the priority:

02/02,843 6 March 2002 (06.03.2002)

FR

(71) Applicant (for all designated States except US): L'AIR LIQUIDE, SOCIETE ANONYME A DIRECTOIRE ET CONSEIL DE SURVEILLANCE POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE [FR/FR]; Georges Claude, 75, quai d'Orsay, F-75321 Paris Cedex 07 (FR).

(72) Inventor; and

(75) Inventor/Applicant (US only): NOVET, Thierry [FR/FR]; Impasse du Capiton, F-38190 Bernin (FR).

(74) Representatives: LE MOENNER, Gabriel etc.; L'Air Liquide SA, 75, quai d'Orsay, F-75321 Paris Cedex 07 (FR).

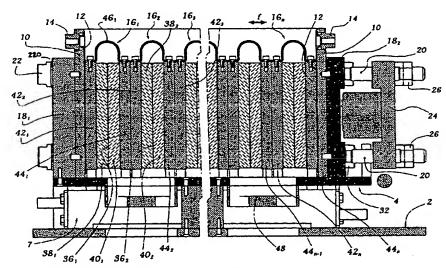
(81) Designated states (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[continued on next page]

As printed

(54) Title: FUEL CELL, CELL OR GROUP OF CELLS BELONGING TO SAID FUEL CELL, REPLACEMENT KIT FOR SAID FUEL CELL AND METHOD FOR MAKING SAME

(54) Titre : PILE À COMBUSTIBLE, CELLULE OU GROUPE DE CELLULES APPARTENANT À UNE TELLE PILE, KIT DE REMPLACEMENT POUR CETTE CELLULE ET SON PROCÉDÉ DE FABRICATION



(57) Abstract: The invention concerns a fuel cell comprising a series of elementary cells $(16_1 \text{ to } 16_n)$, each of said elementary cells including a central structure (36_1) consisting of one membrane and of two electrodes, arranged on either side of said membrane, as well as separation means, for separating each elementary cell relative to the or to each adjacent cell. The invention is characterized in that at least two adjacent cells $(16_1, 16_2, 16_3, 16_n)$ are provided with independent separation means $(44_1, 42_2, 44_2, 42_3, 44_{n-1}, 42_n)$, particular to each of said two cells, such that said two adjacent cells can be disconnected from each other.

03/075390 A2